



# ***DARPA*Tech**

## ***2002 Symposium***

*Transforming*  
***Fantasy***



**Anthony J. Tether**

Director,  
Defense Advanced  
Research Projects Agency





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# DARPA



# DARPA





# DARPA

**Director, Tony Tether**

**Information  
Exploitation**

Richard Wishner  
Steven Welby  
Robert Tenney

**Tactical  
Technology**

Allen Adler  
Art Morrish

**Special  
Projects**

Amy Alving  
Joe Guerici

**Advanced  
Technology**

Tom Meyer

**Information  
Awareness**

John Poindexter  
Robert Popp

**Defense  
Sciences**

Michael Goldblatt  
Steven Wax

**Information  
Processing  
Technology**

Ron Brachman  
Zach Lemnios

**Microsystems  
Technology**

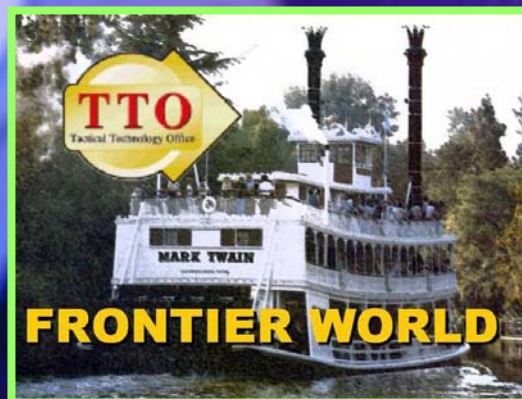
Robert Leheny  
Dave Honey



# After Four Years at DARPA

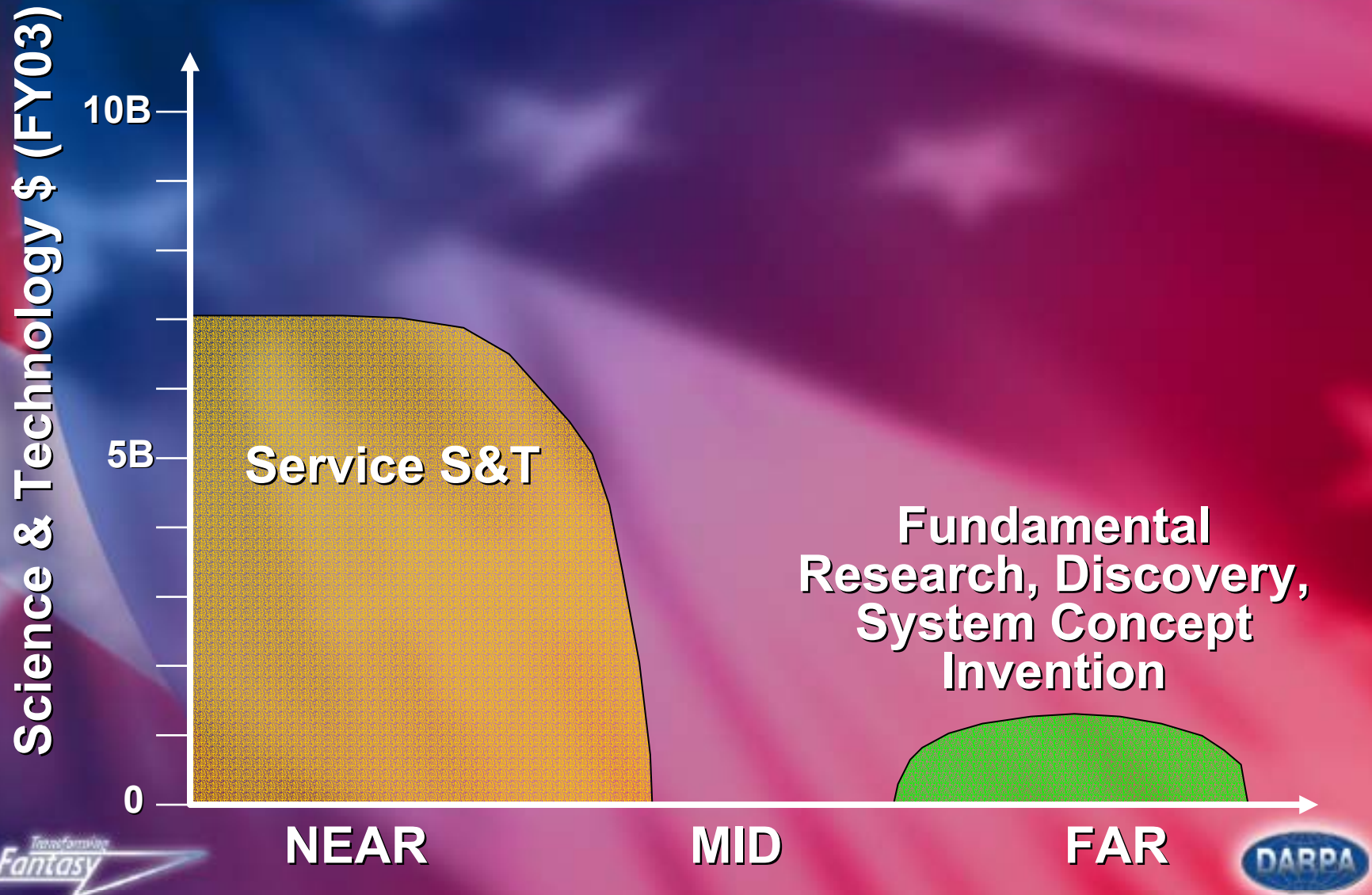




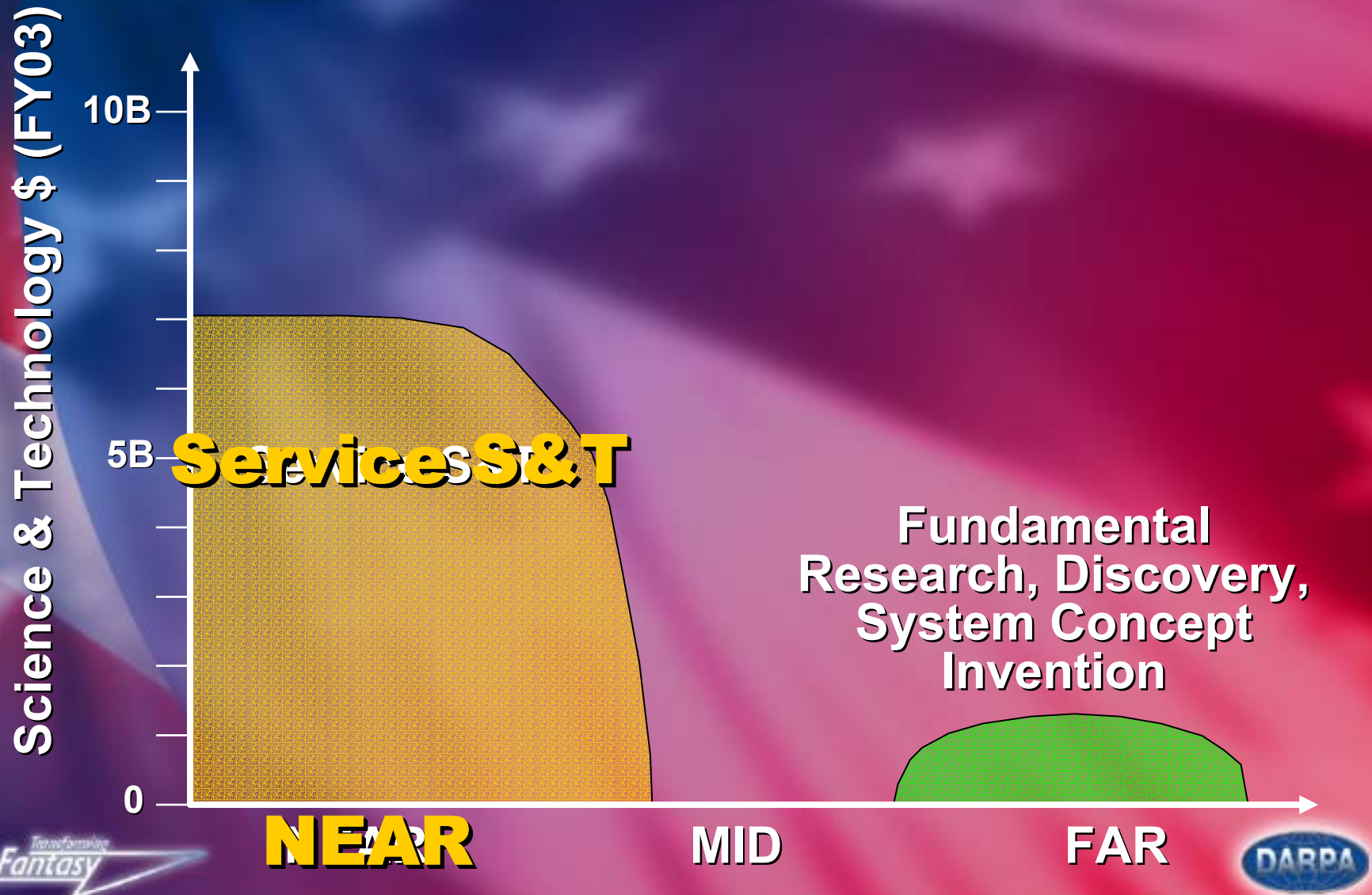




# DARPA Role in Science & Technology

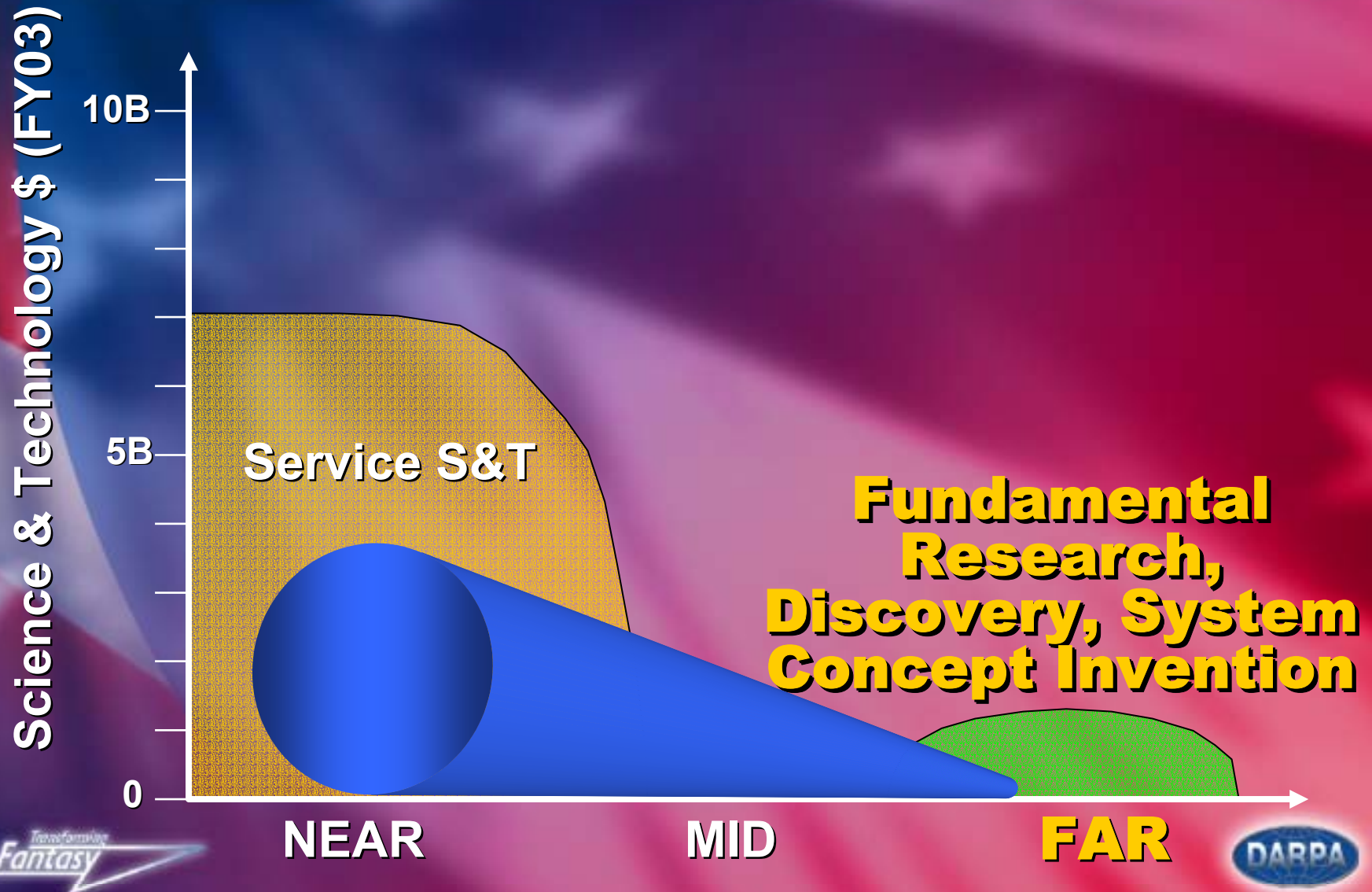


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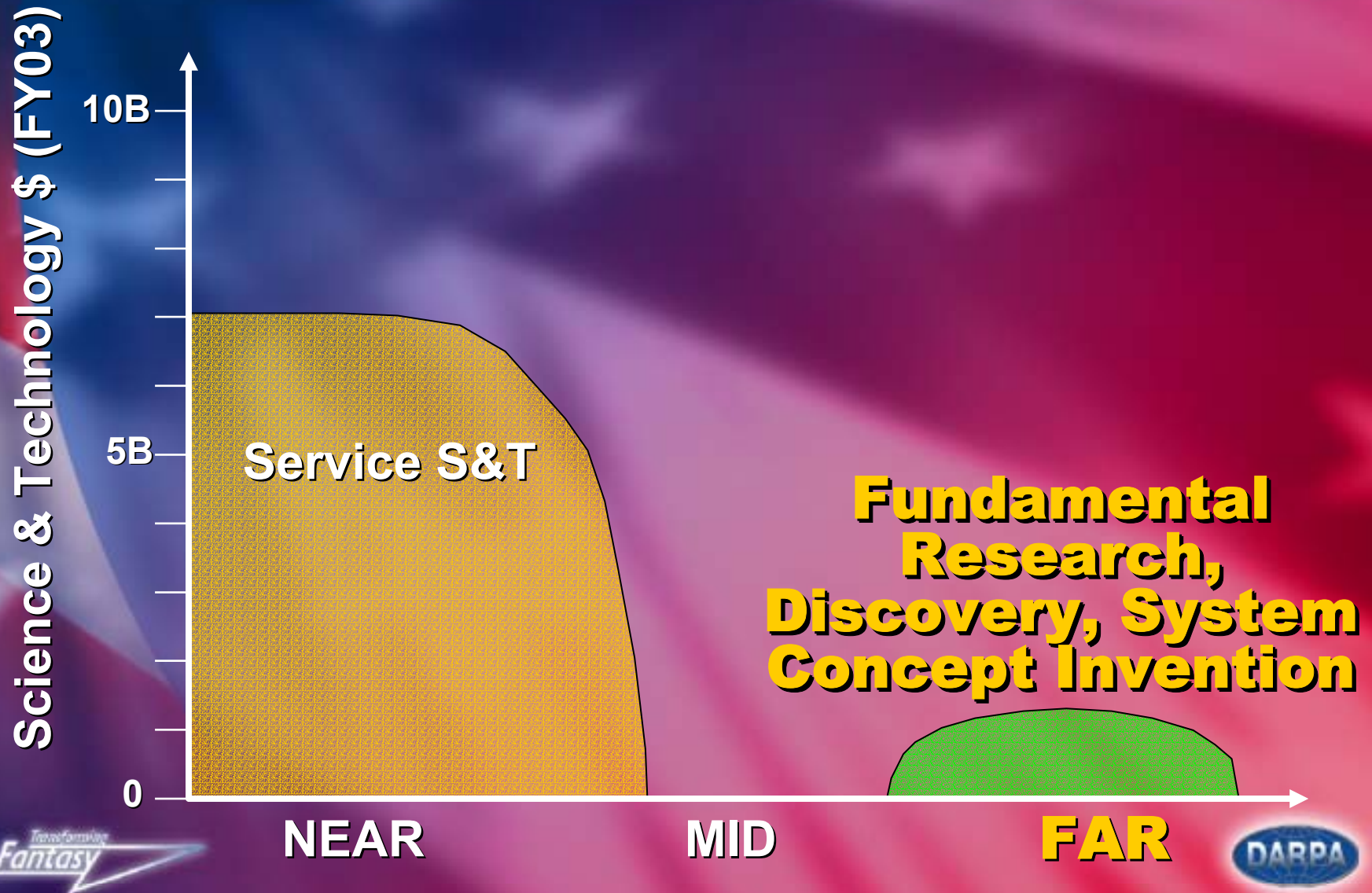




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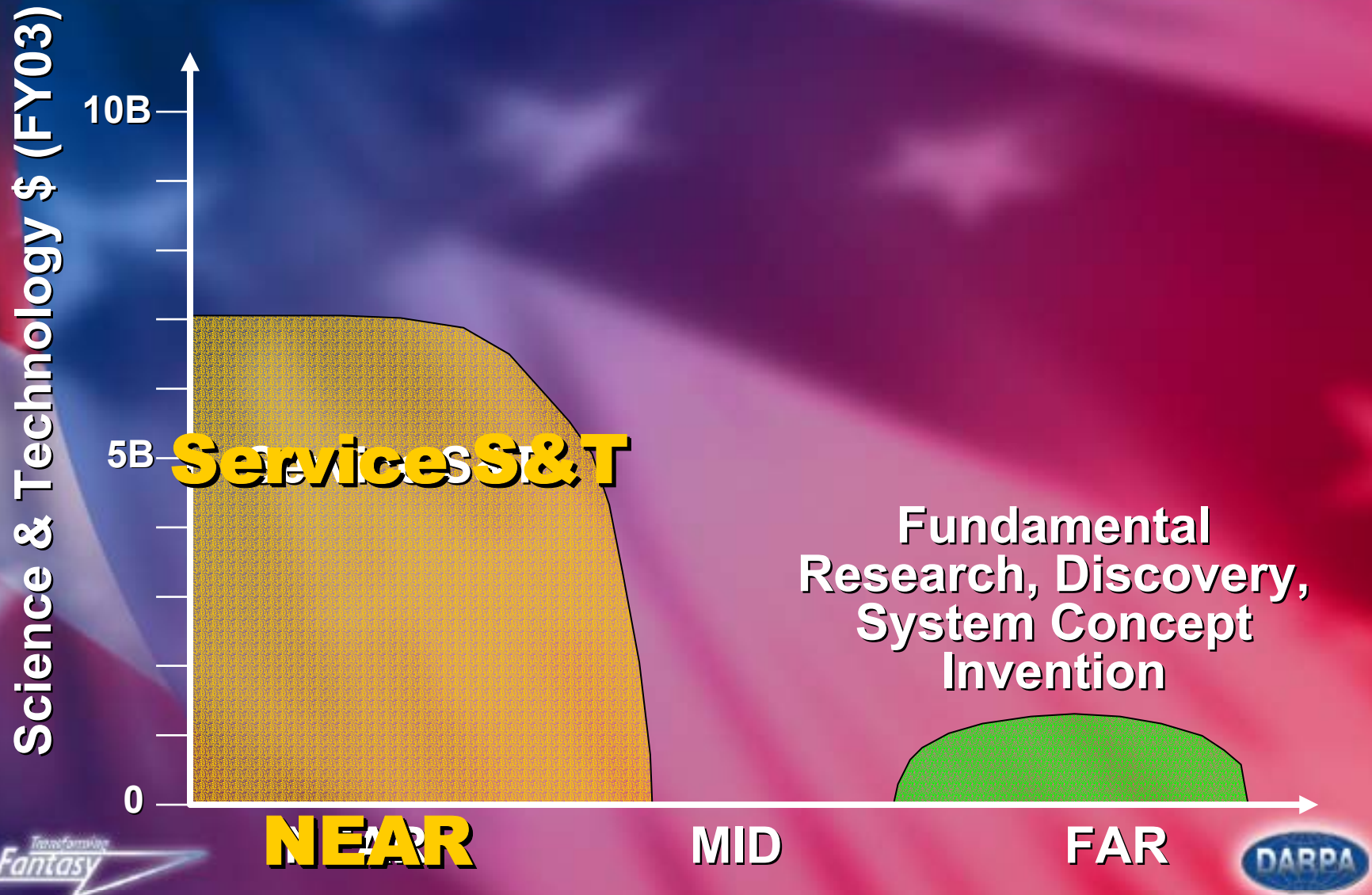


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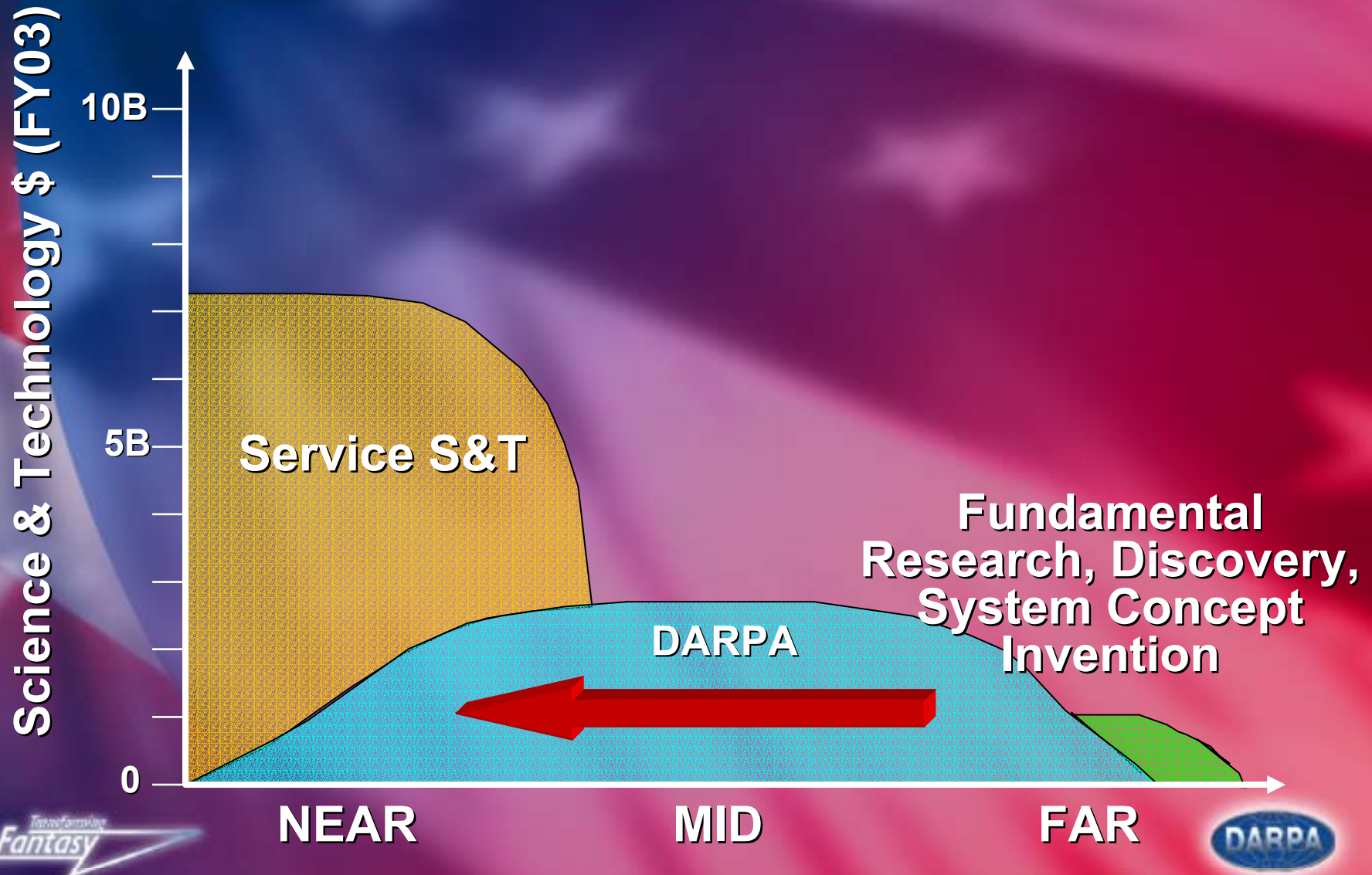




# DARPA Role in Science & Technology



# DARPA Role in Science & Technology





# DARPA Accomplishments

1960



Saturn



Vela



Global Hawk



UCAV

1970



Ground Surveillance Radar



ATACMS



TMR



MEMS



M-16 Rifle



JSTARS

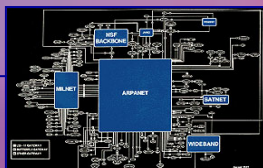


JSF

2000



Stealth Fighter



Arpanet



Uncooled IR



MALD

1980



Sea Shadow



GPS



Taurus Launch Vehicle

1990



BAT



Predator

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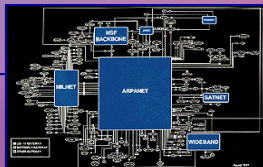


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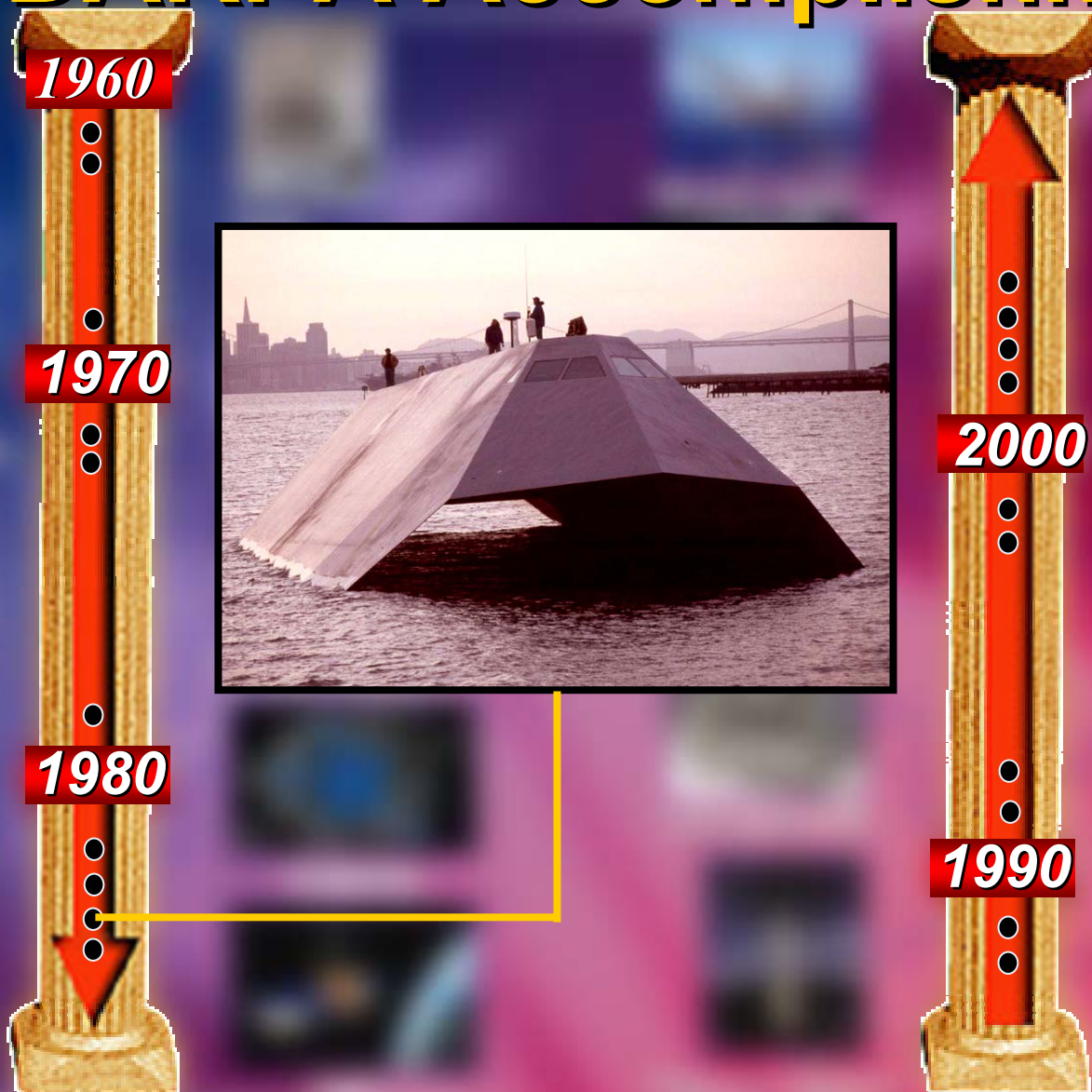


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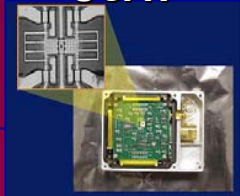
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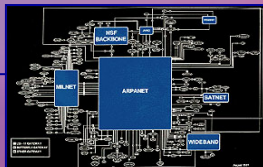
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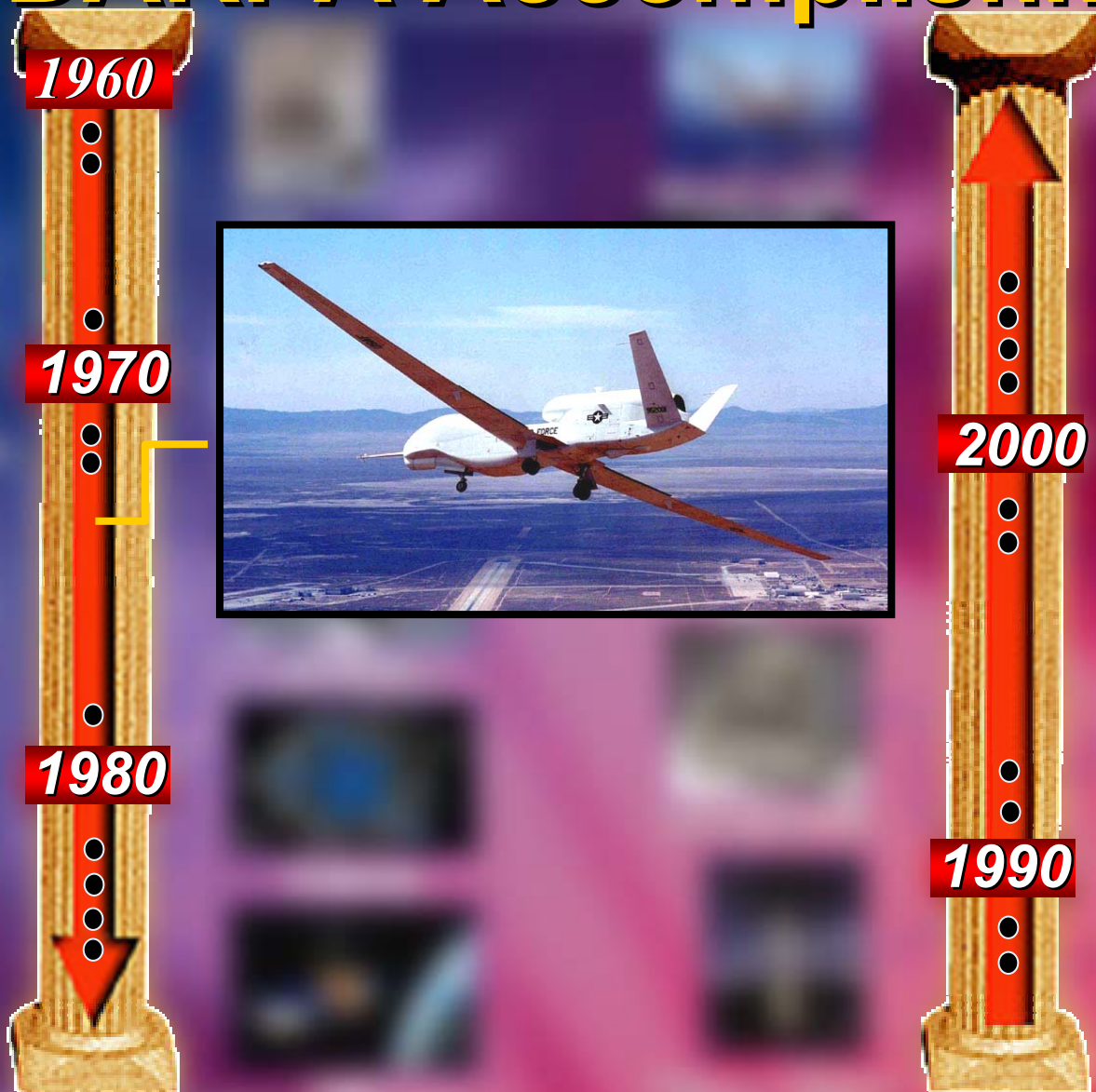


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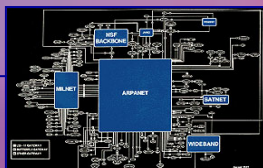
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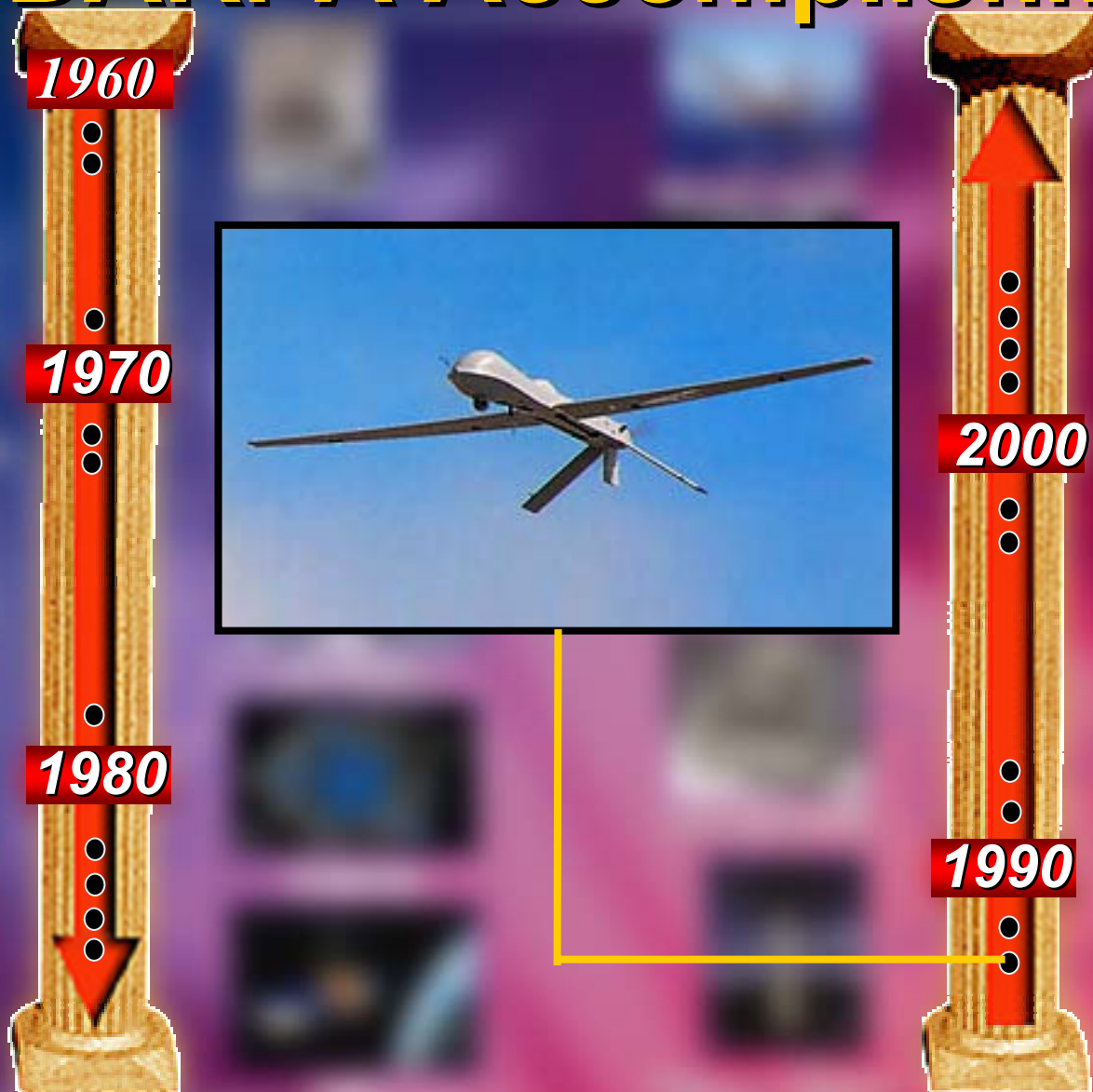
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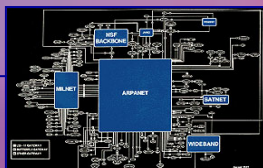


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# DARPA Transition Paths

## Components, tech base



DARPA → Industry Develops Products → Service Production

## Components, small systems



DARPA → Svc S&T → Concept Exp → Progr Defin & Risk Red → EMD → Production

## Other systems innovations



DARPA → [ ] → EMD → Service Production

POM submit





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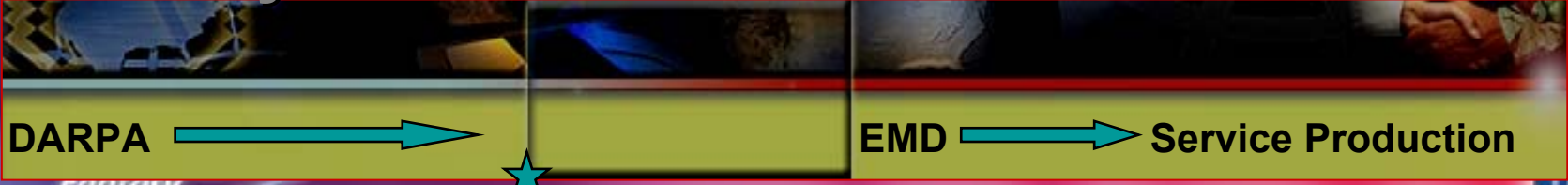
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# Internal Technology Flow

## DARPA OFFICES

Information Awareness  
Information Exploitation

Special Projects  
Tactical Technology  
Advanced Technology

Defense Sciences  
Microsystems Technology  
Information Processing  
Technology

NEAR

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FAR



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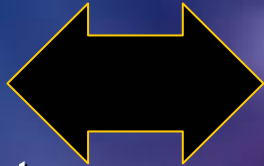




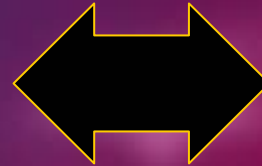
# New Initiative Process



Industry  
Government  
Universities



Program Manager



Office Director



Seedling  
6-12  
Months

Yes/No

Phase I  
Brief  
Permission  
to issue  
BAA

90 Days

Phase II Brief  
Choose  
Performers  
and Define  
Milestones

3-5 Yrs  
Start Program

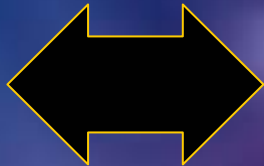
DIRO, Program Mgr  
Office Director, Comptroller



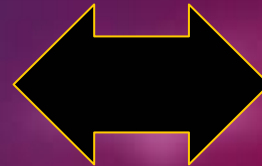
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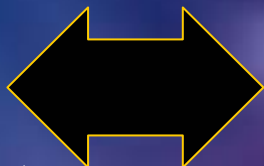




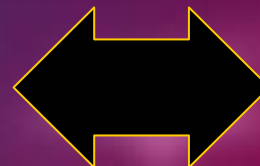
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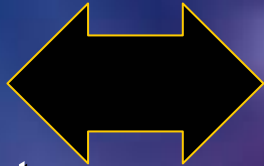
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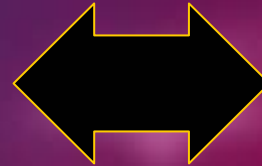
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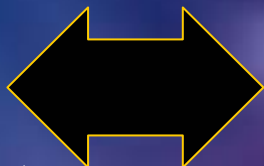




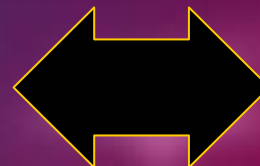
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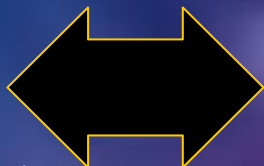
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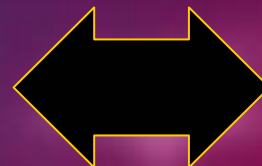
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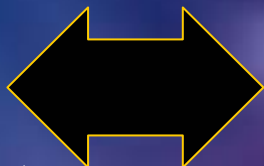




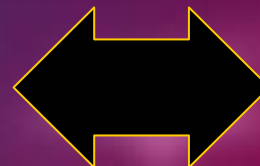
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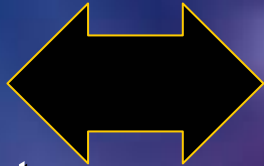
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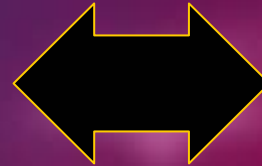
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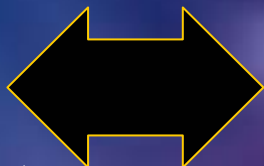




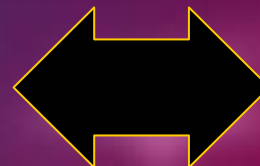
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# ***Investments Today for Future Capabilities***

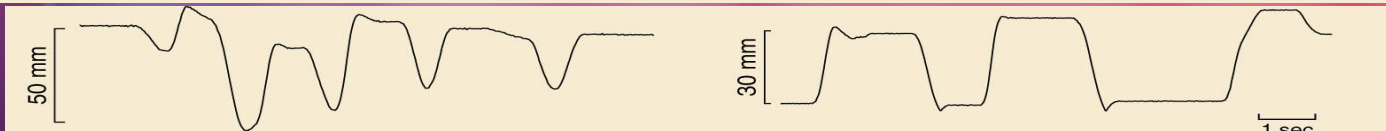
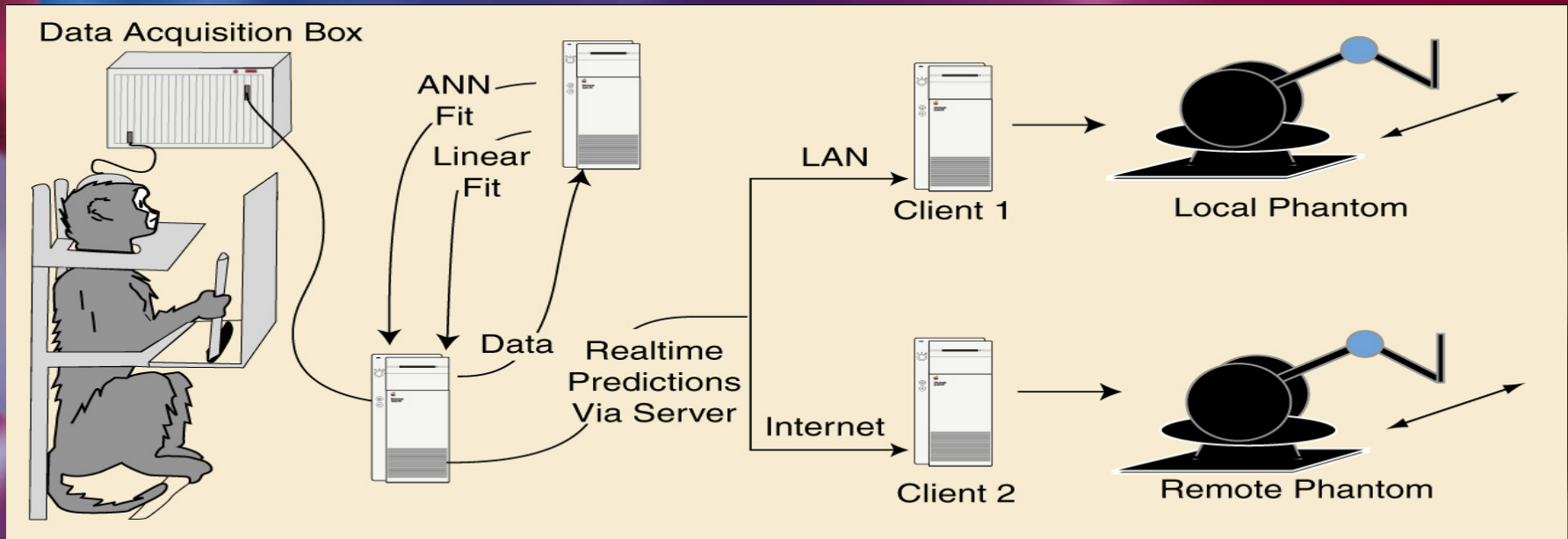
- ▶ **Detect & Defeat Terrorist Networks**
- ▶ **Detection, Precision ID, Tracking, and Destruction of Elusive Surface Targets**
- ▶ **Characterization of Underground Structures**
- ▶ **Networked Manned & Unmanned Systems**
- ▶ **Robust, Secure Self-Forming Tactical Networks**
- ▶ **Cognitive Systems**
- ▶ **Assured Use of Space**
- ▶ **Bio Revolution**





# Brain Machine Interface

Direct brain signals to control devices & machines in real time from remote locations.



# Conclusion

- ▶ DoD Science & Technology Funds Increasing
  - **Administration Goal is 3% Reinvestment of DoD Top Line**
- ▶ DARPA Always Interested in Good Ideas
  - Engage Program Managers
  - Become a Program Manager





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**Insert video**







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